



US 20170060183A1

(19) **United States**(12) **Patent Application Publication****Zhang et al.**(10) **Pub. No.: US 2017/0060183 A1**(43) **Pub. Date: Mar. 2, 2017**(54) **ELECTRONIC DEVICES WITH
RETRACTABLE DISPLAYS**(52) **U.S. Cl.**
CPC **G06F 1/1628** (2013.01); **H01L 51/0097**
(2013.01)(71) Applicant: **Apple Inc.**, Cupertino, CA (US)(72) Inventors: **Zhen Zhang**, San Jose, CA (US); **Paul
S. Drzaic**, Morgan Hill, CA (US)(21) Appl. No.: **14/833,999**(22) Filed: **Aug. 24, 2015****Publication Classification**(51) **Int. Cl.**
G06F 1/16 (2006.01)
H01L 51/00 (2006.01)(57) **ABSTRACT**

An electronic device may have a pair of elongated housings. A flexible display may be placed in a first position in which the display is retracted within one of the housings and a second position in which the flexible display is deployed and extends between the housings in a planar shape for viewing by a user. Support structures such as rigid slats that run parallel to the housings and bistable slats that run perpendicular to the rigid slats may be used to support the flexible display. Speakers, microphones, cameras, and other components can be mounted in the housings. The housings may be held together using magnets and may contain electrical components such as integrated circuits, batteries, and other devices. The components may be mounted on printed circuit boards that rotate within a rotating roller around which the display is wrapped when retracted.

